



hickorynut

Obovaria olivaria

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The hickorynut mussel has an oval or oblong shell that is thick, solid, and “inflated.” The anterior and posterior ends are broadly rounded. The umbo (hump near the hinge) is rounded, curved inward, and directed forward. The outside of the shell is olive green or yellowish brown with faint rays in younger shells, becoming dark brown in older individuals. The surface is smooth. The inside of the shell is white and is iridescent toward the posterior end. The hickorynut may reach lengths up to four inches.

Natural History

The hickorynut is found in large rivers in sand or mixed sand and gravel. It rarely is found in medium to small streams. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to

the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Host fish for this mussel include the shovelnose sturgeon. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

Mississippi River; interior rivers and streams

Iowa Status

common; native

Iowa Range

Mississippi River and lower reaches of its large tributaries

Bibliography

Iowa Department of Natural Resources. 2001.
Biodiversity of Iowa: Aquatic Habitats CD-ROM.